

MINIMIZING THE CONSEQUENCES OF SELF-OBJECTIFICATION IN COLLEGE WOMEN THROUGH YOGA

Taylor T. Allard*

**Graduate Student, M.S. Program in Clinical Psychology
and**

Elizabeth A. Harwood, Ph.D.**

Assistant Professor and Department Coordinator, Department of Psychology

Body dissatisfaction and disordered eating are widespread among college women (Fitzsimmons-Craft, Harney, Brownstone, Higgins, & Bardone-Cone., 2012; Fredrickson & Roberts, 1997; Greenleaf & McGreer, 2006; Hausenblas & Fallon, 2006; Mazzeo, 1999; Steg, Buunk, & Rothengatter, 2008; Tylka, 2004). Self-Objectification theory (Fredrickson & Noll, 1998; Fredrickson & Roberts, 1998) helps explain why mental health problems, in particular eating disorders, disproportionately affect women. Women internalize cultural ideals of thinness, experience sexualization (or sexual objectification) by men, and physically compare themselves to other women (Calogero et al., 2011; Fitzsimmons-Craft et al., 2012; Fredrickson & Noll, 1998; Fredrickson & Roberts, 1997). How the female body looks to others becomes priority, and how the body feels become secondary (Fredrickson & Roberts, 1997; Fredrickson & Noll, 1998). Body surveillance and self-monitoring then become unconscious habits, which in turn perpetuate the dissatisfaction and body image disturbances, continuously and mindlessly repeating an unhealthy cycle (Fredrickson & Noll, 1998; Hausenblas, Cook, & Chittester, 2008; Hausenblas & Fallon, 2006; Williamson, White, York-Crowe, & Stewart, 2004).

Exercise, a habit that is intended to better one's physical health, can actually decrease one's mental health by increasing body dissatisfaction and body shame (Greenleaf & McGreer, 2006; Hausenblas & Fallon, 2006). The motivation behind exercise is often to alter one's weight or shape and to lose weight. When these goals are not met, dissatisfaction and shame levels are increased (Greenleaf & McGreer, 2006; Hausenblas & Fallon, 2006). Women may benefit from replacing mindless, potentially mentally harmful exercise with mindful, mentally healthy exercise. The proposal of this paper is that yoga may help counteract the negative emotions and behaviors often experienced by college females (Douglass, 2009; Forfylyow, 2011; Impett, Daubenmier, & Hirschman, 2006). Yoga reconnects the mind and body as one (Clancy, 2011). Yoga returns the focus back to internal bodily cues and sensations, de-emphasizing the focus on and importance of external perspectives (Douglass, 2009; Forfylyow, 2011; Impett et al., 2006). Thus, recommending yoga to college women as a form of mindfulness-based exercise may help decrease body image disturbances and body surveillance, and could potentially prevent the development and worsening of self-objectification and disordered eating in college women (Hausenblas et al., 2008; Rani & Rao, 1994). Prevention of mental health disorders that disproportionately affect women (i.e., eating disorders) begins with deterring more mild forms of sub-clinical disordered eating from worsening into full-blown clinical eating disorders.

Self-Objectification Theory

Self-Objectification theory (Fredrickson & Noll, 1997; Fredrickson & Roberts, 1998) helps explain why disordered eating disproportionately affect women, in particular college aged women. According to this theory, women internalize cultural ideals of thinness and the objectification of their bodies as sexualized

objects for the use of others (Fredrickson & Noll, 1997; Fredrickson & Roberts, 1998). Both the thin ideal and sexual objectification are present in almost all forms of culture and media: magazines, movies, advertisements, sports photography, and music videos (Fredrickson & Noll, 1997; Fredrickson & Roberts, 1998). Few women can completely escape these objectifying contexts and the resulting consequences (Fredrickson & Noll, 1997; Fredrickson & Roberts, 1998). The cultural, external perspective becomes more and more engrained in a woman's mind and it soon becomes her primary view (Fredrickson & Noll, 1997; Fredrickson & Roberts, 1998). Awareness of internal cues and bodily sensations diminishes and how her body looks and physically appears takes precedent (Fredrickson & Noll, 1997; Fredrickson & Roberts, 1998). As a woman's self-perspective changes, her risk for body monitoring and body shame increase (Fredrickson & Noll, 1997; Fredrickson & Roberts, 1998; Greenleaf & McGreer, 2006; Tylka & Hill, 2004). The accumulation of such experiences increases her chances for mental disorders such as anxiety, depression, and eating disorders (Fredrickson & Noll, 1997; Fredrickson & Roberts, 1998).

The accumulation of sexual objectifying experiences serves to shift and change self-body relations, such that women come to view their own bodies as objects which can be normatively gazed upon by men (Calogero et al., 2011). Thus, self-objectification is the consequence of being regularly exposed to sexually objectifying experiences (Calogero et al., 2011). Sexual and self-objectification are harmful to the psyche of women (Fredrickson & Noll, 1997; Fredrickson & Roberts, 1998).

The physical and psychological consequences of self-objectification represent a shared social experience among women, regardless of ethnicity, class, sexuality, age, and physical and personal attributes (Calogero et al., 2011; Fredrickson & Roberts, 1998). All women with reproductively mature bodies are vulnerable to the implications of self-objectification (Calogero et al., 2011; Fredrickson & Roberts, 1998). Self-objectification is proposed to lead directly to a many mental health problems by generating recurrent appearance anxiety and body shame, consuming mental energy that could be used for more rewarding activities, and reducing sensitivity to internal bodily cues (Fredrickson & Roberts, 1997; Calogero et al., 2011).

Body Shame

Self-Objectification increases the opportunity for women to experience *body shame* (Fredrickson & Noll, 1998). Shame occurs when women compare themselves to the cultural ideals of thinness and beauty, and fail to meet those standards (Fredrickson & Noll, 1998). Empirical studies show that most women experience a discrepancy between their body and their idealized body (Fredrickson & Noll, 1998). While this information may seem anecdotal, that discrepancy results in shame (i.e., feeling out of shape, fat, or a failure) and can lead to more serious mental health problems (Fredrickson & Noll, 1998). Shame is also theorized to be a moral emotion, adding to the desire and sense of necessity to conform to society (Fredrickson & Noll, 1998). Anecdotally, women deem eating chocolate as "sinning" and dieting is a metaphor for "being good." Since body ideals are theorized as moral ideals this elevates their importance and amplifies feelings of failure to meet the social standards (Fredrickson & Noll, 1998).

Theorists propose that shame is the motivating factor behind women changing themselves to meet idealized, cultural standards of beauty and thinness (Fredrickson & Noll, 1998). Shame is also the motivating emotion behind dieting (healthy and unhealthy) that may put women at an increased risk for eating disorders (Fredrickson & Noll, 1998). Research has demonstrated that the threat of experiencing body shame influences dieting and disordered eating (Fredrickson & Noll, 1998). In a sample of 500 women aged 18 to 30, twenty-five percent dieted, even though they did not consider themselves

overweight (Fredrickson & Noll, 1998). Fredrickson and Roberts (1997) propose that body shame, as a result of self-objectification, places women at a higher risk for disordered eating. Restrictive eating is used in theory as a preventative method to avoid body shame and disturbed body image (Fredrickson & Noll, 1998). However, restrictive eating and dieting can increase body shame, rather than relieve it, as promised by most dieting programs and supplements (Fredrickson & Noll, 1998). Weight loss behaviors, such as exercise, cause women to pay more attention to their weight and shape; these behaviors heighten women's awareness of failure to meet standards, therefore increasing body shame—it is a vicious cycle (Fredrickson & Noll, 1998).

Body Image

Body image is a continuum of perception about how one perceives aspects of her body or overall appearance (Clancy, 2011). Disturbed body image is usually the result of not being able to obtain the ideal aesthetic standard for “beauty” (Clancy, 2011). Individuals with body shame and anxiety tend to process information through a negative body-schema, which reinforces the negative perceptions of one's body (Williamson et al., 2004). Women engage in unhealthy eating and exercise behaviors to alter their weight or shape in hopes of making themselves feel better; however, succeeding or failing in following unrealistic eating and exercise plans cause body image to worsen (Hausenblas et al., 2008; Hausenblas & Fallon, 2006). The motivation behind these behaviors, to alter weight or shape, avoidance of gaining weight, or fear of becoming fat are diagnostic criteria for eating disorders (American Psychiatric Association, 2013).

Over the past three decades, the prevalence of eating disorders and disturbed body image has increased (Hausenblas & Fallon, 2006). Negative body image is a component and/or predictor of a variety of other health problems as well; these include depression, obesity, and body dysmorphic disorder (Hausenblas & Fallon, 2006). With such correlates, it is important to understand the antecedents and consequences of negative body image (Clancy, 2011).

Body Surveillance

Studies show a correlation between body image disturbances and body surveillance in Caucasian college females (Fitzsimmons-Craft et al., 2012). *Body surveillance* is the active, cognitive, and behavioral manifestation of self-objectification (Fitzsimmons-Craft et al., 2012). It is via body surveillance that women perceive a discrepancy between their bodies and the idealized, cultural definition of thinness. Body checking is one example of body surveillance; such checking can result in negative outcomes, including disordered eating and body dissatisfaction (Fitzsimmons-Craft et al., 2012). More specifically, body surveillance is thinking about how the body physically looks and how clothes fit, rather than how the body feels (Fitzsimmons-Craft et al., 2012). Considerable evidence shows that women who are high in self-objectification are also high in self-surveillance (Calogero et al., 2011).

Appearance Monitoring

Social Comparison Theory (Festinger, 1954) states that humans, and in this case women, engage in social comparison with others to better understand how they fit in the world. Research shows that when women make appearance-related social comparisons they are done in the upward direction; upward direction meaning an individual the person deems as “better off” or more attractive (Fitzsimmons-Craft et al., 2012). Leahey, Crowther, and Mickelson (2007) found that 80% of appearance-related social

comparisons made by women were done in the upward direction. These upward direction comparisons have been found to be associated with negative outcomes, including body dissatisfaction, shame, and even eating disorders (Fitzsimmons-Craft et al., 2012).

Women who are high in self-objectification are often chronically monitoring their appearance (Calogero et al., 2011). Self-surveillance, or body checking behaviors, can be viewed as safety-type behaviors for coping and managing appearance anxiety (Fitzsimmons-Craft et al., 2012). While these behaviors may initially reduce anxiety, they actually increase it in the long run by reinforcing the behavior through immediate (but not long-term) anxiety reduction (Fitzsimmons-Craft et al., 2012).

Flow States

Research shows that women high in self-objectification also spend a lot of time and emotional resources thinking about how they appear to others; thus, theoretically spending less time in states of internal focus and bodily awareness (Calogero et al., 2011). Many studies have explored the relationship between self-objectification and fewer states of flow experiences (Calogero et al., 2011). *Flow states* are defined as states of intense concentration and internal focus (Calogero et al., 2011). A healthy alternative to self-objectification is experience grounded in flow states (Impett et al., 2006). Yoga is a mind-body exercise that provides one way to reduce experiences of self-objectification by increasing opportunities to experience flow states (Impett et al., 2006). Yoga practitioners learn to value, listen, and respond to their body sensations (Impett et al., 2006).

Tiggemann and Kuring (2004) found in college students that self-objectification was indirectly related to flow states through self-surveillance. More specifically, self-objectification was related to higher levels of self-surveillance (i.e., thinking about one's appearance), which in turn correlated with fewer states of flow experiences (i.e., internal, bodily focus). Greenleaf (2005) also found a correlation between self-surveillance and flow states for women ranging from 18 to 64 years of age. Another recent study conducted by Szymanski and Henning (2007) found that the more time women spent thinking about their appearance and monitoring how they look to others, the less time they spent focused on other tasks.

Body Dissatisfaction

Body dissatisfaction is defined as a person's negative thoughts about his or her own body, and generally involves a discrepancy between one's own body type and one's ideal body type (Grogan, 2008). While the behavioral manifestation of self-objectification is body surveillance, body surveillance and body checking lead to body dissatisfaction; in other words, all three are intertwined (Fitzsimmons-Craft et al., 2012). But, body dissatisfaction is the most consistent and robust risk and maintenance factor for disordered eating (Fitzsimmons-Craft et al., 2012). Thus, body dissatisfaction is an important variable to examine, especially due to its commonality.

Body dissatisfaction is extremely common in women; four out of five women in the United States are dissatisfied with their body (Steg et al., 2008). Alone it is not a determining factor of any mental disorder (i.e., eating disorder); however, body dissatisfaction coupled with constantly thinking about how one appears to others (i.e., body surveillance) is more predictive in determining a potential causational factor in eating disorders (Tylka, 2004). Tylka (2004) found that the combination of body dissatisfaction and body surveillance was the strongest predictive factor in a woman's likelihood of experiencing eating disorder symptoms. Only about 50% of women appreciate their body; showing

respect for their body through healthy eating and exercise habits, which increases body appreciation and decreases body dissatisfaction (Tylka, 2011).

College Females

Appearance is closely related to identity; when women go away to college their self-identity is questioned and changed (Clancy; 2011; Fredrickson & Roberts, 1997). Eighty percent of college women experience body dissatisfaction; dissatisfaction rates are higher for Caucasian women than African American women and other ethnicities (Fitzsimmons-Craft et al., 2012). However, other research has argued that African American women, who idealize the Caucasian female, reject their own identity, have higher levels of dissatisfaction, and demonstrate high levels of disordered eating attitudes (Fitzsimmons-Craft et al., 2012). For women, regardless of race, college places a strong emphasis on social interactions and socio-cultural appearance ideals about weight and shape (Clancy, 2011; Shaw & Waller, 1995). Furthermore, college is a time geared towards preparing oneself for the future. Research shows that physical attractiveness plays a much bigger role in life outcome (jobs, economical, social) for women than for men (Daubenmeir, 2005; Impett et al., 2006). This adds to the idea that if women alter their body or shape to the ideal cultural norm, they will fit in, be socially accepted, and receive favorable treatment (Impett et al., 2006).

Women who go away to school are at a general higher risk for anxiety, discontent, dieting, and general eating disturbances (Mazzeo, 1999). Clinically diagnosed eating disorders are less common in college females, approximately six-and-a-half percent; however, 20% of students engage in disordered eating behaviors (Mazzeo, 1999). In fact, unhealthy eating behavior is considered relatively normal among female undergraduates; a reported 61% of college females engage in intermediate form of an eating disorder—chronic dieting, bingeing or purging alone, or subclinical bulimia (Mazzeo, 1999).

Body image disturbances and unhealthy eating behaviors typically start before college. Eighty-one percent of ten year olds are afraid of becoming fat (TEFP, 2013). Fifty-two percent of high school females state they skip meals or fast to control their weight. Forty-five percent of American women diet regularly and dieting is the most common behavior that will lead to an eating disorder (TEFP, 2013). However, not all women who are unhappy with how they look begin dieting and exercising. Behavior crosses over from healthy to unhealthy (or disordered eating to eating disorder) when internal cues are ignored, bodily sensations are no longer felt, and in some cases, exercise is excessive (Clancy, 2011; Douglass, 2009; Zunker et al., 2011). Examples of unhealthy thoughts include dissatisfaction when looking in the mirror because the image does not portray the thin ideal (Mintz, Awad & Stinson, 2013). Examples of unhealthy behaviors include altering food and exercise routines for the rest of the day due to a number on the scale (Mintz et al., 2013).

Exercise

Exercise is recommended by doctors for its physical health benefits; however, when done in excess, exercise can have many harmful consequences (Kessler, 2010). Exercise plays a role in the development and course of body image disturbances, body dissatisfaction, and disordered eating (Hausenblas et al., 2008; Hausenblas & Fallon, 2006). Exercise has been looked at within the objectification framework (Frederickson & Nolls, 1998) and research has found that objectification is related to appearance-related motives for exercise (Prichard & Tiggemann, 2005, 2008). As a logical extension of the framework, it appears that women exercise in excess as a way to decrease body shame and improve body image to an extent that exercise becomes a harmful obligation (Kessler, 2010; Littleton & Ollendick, 2003).

If women maintain a negative body image, they may turn to exercise in hopes of attaining society's ideal thinness; however, since these standards are unrealistic, exercise may become such an important obligation that it begins to take precedent over all other priorities (Kessler, 2003; Littleton & Ollendick, 2003). Other women may view exercise as a way to counter or control a caloric balance; either way, both intents to exercise are unhealthy and can lead to exercise dependence (Kessler, 2010). Some researchers argue that since a common motivation for exercise is appearance related (alter ones weight / shape; aversion to fat), women who do not exercise regularly will have higher overall body satisfaction and body image than those who exercise regularly (Greenleaf & McGreer, 2006).

Furthermore, what makes exercise such an interesting variable is its many confounding factors. For example, the environment can increase the exerciser's body awareness with mirrored walls and tight-fitting or revealing clothing. Martin Ginis, Jung, and Gauvin (2003) found that women who exercise in mirrored environments felt worse after exercising than women who engaged in non-mirrored environments (Greenleaf & McGreer, 2006). The motivation behind why a woman exercises is important. If women want to exercise for health and wellness, physical activity may increase competence and satisfaction with one's body and decrease self-objectification (Greenleaf & McGreer, 2006).

Yoga

Yoga is a mild form of exercise that increases flexibility, strength, and balance; however, most individuals who engage in the practice find it more mentally than physically challenging (Forfylyow, 2011; Khalsa et al., 2009). Often people with disordered eating view their body as an object they can control and manipulate; the goal of yoga would be to help the individual accept their body non-judgmentally as a living, breathing entity (Douglass, 2009). The mindfulness component of yoga will help bring the focus back to internal awareness and away from external, physical appearance. Acceptance will help increase body satisfaction and body image confidence. Both increased mindfulness and body satisfaction will help to reduce self-objectification (Douglass, 2009). Researchers have determined that the greater the yoga experience (number of hours practiced) the greater the benefits (Daubenmier, 2005; Impette et al., 2006). To see these benefits, yoga should be practiced three to five times a week for an hour-and-a-half, lasting at least eight to 10 weeks (Clancy, 2011; Daubenmier, 2005; Impett et al., 2006). However, further empirical evidence is needed to support yoga as a legitimate component in reducing the consequences of self-objectification.

Exercise on its own can be a potentially maladaptive behavior; it can feed into and repeat the mindless cycle: altering body shape to fit the cultural definition of thin and beautiful (Greenleaf & McGreer, 2006). Yoga, on the other hand, can be a positive and adaptive form of exercise as a mindfulness, relaxation, and acceptance technique (Douglass, 2009; YTT, 2010). Recommending yoga to college women as a form of exercise to increase mindfulness, decrease body image disturbances and body surveillance may help to prevent self-objectification (Hausenblas et al., 2008; Rani & Rao, 1994).

Mindfulness

Mindlessness can relate to the process of continuing to repeat the same behavior or thought without awareness (Clancy, 2011). *Mindfulness* is the act of becoming more aware of, open-minded to, and curious about the body; it is the heightened awareness of bodily sensations that arise moment-to-moment (Clancy, 2011). Mindfulness is associated with low levels of neuroticism, anxiety and depressive symptoms, as well as high levels of self-esteem and satisfaction with life (Brown & Ryan, 2003).

Mindfulness is the ability to perceive the body from diverse perspectives in a state of dynamic awareness; it is the ability to non-judgmentally attend to the inner world of the bodily experience (Clancy, 2011).

Mindfulness is at the core of yoga (Clancy, 2011). With each breath, through each pose, the practitioner is encouraged to develop a new level of mindfulness (Clancy, 2011). Yoga refocuses awareness and attention inward, on how the body feels and functions, versus how it appears (Impett et al., 2006). A new relationship based on acceptance, rather than shame and conflict, between the mind and body is built (Clancy, 2011). As compared to non-practitioners, yoga practitioners have lower self-objectification and higher levels of body satisfaction and body awareness (Boudette, 2006; Daubenmier, 2005). Body awareness, or mindfulness, is positively related to body satisfaction and negatively related to self-objectification (Clancy, 2011; Daubenmier, 2005; Rani & Rao, 1994).

Conclusion

Researchers have found a positive relationship between self-objectification and body dissatisfaction in undergraduate college females (Clancy, 2011; Shaw & Waller, 1995; Tylka & Hill, 2004). Implications for increased self-objectification include body shame and disordered eating (Clancy, 2011; Fredrickson & Noll, 1998). Furthermore, self-objectification decreases mindfulness and body awareness (Clancy, 2011; Daubenmier, 2005). Women begin to focus on how their body looks, rather than how it feels (Fitzsimmons-Craft et al., 2012; Fredrickson & Noll, 1998). Self-objectification theory is one model that helps explain why certain mental disorders (i.e., eating disorders and anorexia) disproportionately affect women (Fredrickson & Roberts, 1997; Fredrickson & Noll, 1998). Yoga can reduce self-objectification by returning the focus from an external to internal orientation (Clancy, 2011; Daubenmier, 2005; Fredrickson & Roberts, 1997; Impett et al., 2006). Yoga has the potential to reduce all the side effects of self-objectification: body shame, disordered eating, body image disturbances and dissatisfaction. ■

References

- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Boudette, R. (2006). Question & Answer: Yoga in the treatment of disordered eating and body image disturbance: How can the practice of yoga be helpful in recovery from an eating disorder? *Eating Disorders*, 14(2), 167-170. doi:10.1080/10640260500536334
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of personality and social psychology*, 84(4), 822.
- Calogero, R. M., Tantleff-Dunn, S., and Thompson, J.K. (2012). Self-objectification in women: causes, consequences, and counteractions. American Psychological Association. Washington, D.C.
- Clancy, S. (2011). The effects of yoga on body dissatisfaction, self-objectification, and mindfulness of the body in college women. *Dissertation Abstracts International*, 72.
- Daubenmier, J. J. (2005). The relationship of yoga, body awareness, and body responsiveness to self-objectification and disordered eating. *Psychology of Women Quarterly*, 29(2), 207-219. doi:10.1111/j.1471-6402.2005.00183.x
- Douglass, L. (2009). Yoga as an intervention in the treatment of eating disorders: Does it help? *Eating Disorders: The Journal of Treatment & Prevention*, 17(2), 126-139. doi:10.1080/10640260802714555
- Festinger, L. (1954). A theory of social comparison processes. *Human relations*, 7(2), 117-140.
- Fitzsimmons-Craft, E., Harney, M. B., Brownstone, L. M., Higgins, M. K., and Bardone-Cone, A. (2012). Examining prospective mediation models of body surveillance, trait anxiety, and body dissatisfaction in

- African American and Caucasian college women. *Sex Roles*, 67(3/4), 187-200. doi:10.1007/s11199-012-0151-5
- Forfylow, A. (2011) Integrating yoga with psychotherapy: A complimentary treatment for anxiety and depression.
- Fredrickson, B. L., and Roberts, T. (1997). Objectification theory: toward understanding Woman's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21, 173-206.
- Fredrickson, B. L. and Noll, S. M. (1998). A meditational model linking self-objectification, body shame, and disordered eating. *Psychology of Women Quarterly*, 22 (4), 623-636.
- Greenleaf, C., and McGreer, R. (2006). Disordered eating attitudes and self-objectification among physically active and sedentary female college students. *Journal of Psychology: Interdisciplinary and Applied*, 140, 187-198.
- Grogan, S. (2008). Body image: understanding body dissatisfaction in men, women and children. (2nd ed.) New York: Routledge.
- Hausenblas, H. A., Cook, B. J., and Chittester, N. I. (2008). Can exercise treat eating disorders? *Exercise and sports sciences reviews*, 36(1), 43-47.
- Hausenblas, H. A., and Fallon, E.A. (2006). Exercise and body image: A meta-analysis. *Psychology & Health*, 21(1), 33-47. doi: 10.1080/14768320500105270
- Impett, E., Daubenmier, J., and Hirschman, A., (2006). Minding the body: Yoga, embodiment, and well-being. *Journal of Sexuality Research and Social Policy*. 3(4) 39-40.
- Kessler, K., L. (2010). Self-objectification, body image, eating behaviors, body image, and exercise dependence among college females. University of North Texas, 1-52.
- Khalsa, S. B. S., Shorter, S. M., Cope, S., Wyshak, G., & Sklar, E. (2009). Yoga ameliorates performance anxiety and mood disturbance in young professional musicians. *Applied psychophysiology and biofeedback*, 34(4), 279-289.
- Leahey, T. M., Crowther, J. H., and Mickelson, K. D. (2007). The frequency, nature, and effects of naturally occurring appearance-focused social comparisons. *Behavior Therapy*, 38, 132-143.
<http://dx.doi.org/10.1016/j.beth.2006.06.004>.
- Littleton, H. L., & Ollendick, T. (2003). Negative body image and disordered eating behavior in children and adolescents: What places youth at risk and how can these problems be prevented? *Clinical Child and Family Psychology Review*, 6, 51-66.
- Martin Ginis, K. A., Jung, M. E., & Gauvin, L. (2003). To see or not to see: Effects of exercising in mirrored environments on sedentary women's feeling states and self-efficacy. *Health Psychology*, 22, 354-361.
- Mazzeo, S. E. (1999). Modification of an existing measure of body image preoccupation and its relationship to disordered eating in female college students. *Journal of Counseling Psychology*, 46(1), 42-50. doi:10.1037/0022-0167.46.1.42
- Mintz, L. B., Awad, G. H., Stinson, R. D., Coker, A.D., Kashubeck-West, S., and Connelly, K. (2013). Weighing and body monitoring among college women: the scale number as an emotional barometer. *Journal of College Student Psychotherapy*, 27(1), 78-91
- Prichard, I., & Tiggemann, M. (2005). Objectification in fitness centers: Self-objectification, body dissatisfaction, and disordered eating in aerobic instructors and aerobic participants. *Sex Roles*, 53, 19-28.
- Prichard, I., & Tiggemann, M. (2008). Relations among exercise type, self-objectification, and body image in the fitness center environment: The role of reasons for exercise. *Psychology of Sport and Exercise*, 9, 855-866.
- Rani, N. J., and Rao, P.K. (1994). Body awareness and yoga training. *Perceptual and Motor Skills*, 79 (3), 1103-1106.
- Shaw, J., and Waller, G. (1995). The media's impact on body image: Implications for prevention and treatment. *Eating Disorders: The Journal of Treatment & Prevention*, 3(2), 115-123. doi:10.1080/10640269508249154
- Steg, L., Buunk, A.P. and Rothengatter, T. (2008). *Applied Social Psychology: Understanding and managing social problems*. Cambridge, UK: Cambridge University Press.
- Szymanski, D. M., and Henning, S. L. (2007). The role of self-objectification in women's depression: A test of objectification theory. *Sex Roles*, 56, 45-53.

- The Emily Program Foundation (2013). The reality of eating disorders.
http://emilyprogramfoundation.org/wpcontent/uploads/2013/01/Eating_Disorders_Infographic5.pdf
- Tiggemann, M., and Kuring, J. K. (2004). The role of body objectification and disordered eating and depressed mood. *British Journal of Clinical Psychology*, 43, 299-311.
- Tylka, T.L. (2004). The relation between body dissatisfaction and eating disorder symptomatology: An analysis of moderating variables. *Journal of Counseling Psychology*. 51(2), 178.
- Tylka, T.L., (2011). Positive psychology perspectives on body image. *Body image: A handbook of science, practice, and prevention*. (2) 56-64.
- Tylka, T.L., and Hill, M.S. (2004). Objectification theory as related to disordered eating among college women. *Sex Roles*, 51, 719-730.
- Zunker, C., Mitchell, J. E., and Wonderlich, S. A. (2011). Exercise interventions for women with anorexia nervosa: A review of the literature. *International Journal of Eating Disorders*, 44(7), 579-584. doi:10.1002/eat.20862
- Williamson, D. A., White, M. A., York-Crowe, E., and Stewart, T. M. (2004). Cognitive-Behavioral Theories of Eating Disorders. *Behavior Modification*, 28(6), 711-738.

* **TAYLOR THERESA ALLARD** is currently a Master's candidate in Clinical Psychology at Rivier University. Her research interests include women's issues, objectification theory, and anorexia nervosa, prevention of mental illness through yoga, and exercise in relation to the development and maintenance of body image and eating disorders. Ms. Allard earned her B.A. in Psychology from the University of New Hampshire.

** **Dr. ELIZABETH A. HARWOOD** received her doctorate in Clinical Psychology from The University of Montana, after completing a pre-doctoral internship at the University of New Hampshire Counseling Center. She is an Assistant Professor of Psychology as well as the Department Coordinator at Rivier University. Dr. Harwood has research interests in the teaching of psychology, cognitive and interpersonal vulnerability factors for depression, relationship satisfaction, and eating disordered behaviors on college campuses.